

02

- 1) - In answer to points 1, 2, 3 and 4 of your communication, please see the following revised pages 1 and 2 of my claims (with page 3 not revised).

The changes are :

Claim 1, line 12

The word "device" is replaced by the word "system".

Claim 1, line 13

Insertion of "closed-loop" in front of the word "belt" to define the belt's shape.

Claim 2, line 24

In front of the word "handle", the adjective "operating", to replace the previous description "firmly-attached".

Claim 2, line 30

In front of "wall", the adjective "adherent" has been cancelled.

Claim 3, line 1

"Claim 2" replaces the words "the preceding claim"

Claim 6 has been dropped (no longer claimed)

- 1 -

## CLAIMS

- 1) An apparatus for opening containers (11) with screw-off lids (12), characterized by consisting essentially of a device to clamp the lid (12) by self-clamping by rotation between two walls (2, 4) mounted to face each other, but not parallel, so that the lid (12) is blocked at its periphery, the adherent surface of wall (2) obliging the edge (31) of the lid (12) of the container (11) to roll without sliding in the unscrewing direction, the lid (12) sliding along the other wall (4) until the lid (12) is wedged between the walls, said self-clamping arrangement including the rotation [device] system causing the self-wedging that is driven by a closed-loop belt drive (5) tightened around the container (11) below the lid (12), preferably at the level of the necking (15) under the screw threads (14).
- 2) An apparatus in conformity with claim 1 characterized by its consisting of :
- a lid-wedging plate (1) held by one hand on the lid (12) to be unscrewed, having on the plate's under surface (30) two walls (2,4), preferably at right angles to the plate (1), and by a flexible ribbon made of supple but adherent material hard to stretch, such as a belt (5) of reinforced rubber in the shape of a loop to encircle the container (11), said loop, closed where it is mounted on a winding drum (6), winds around the drum when the drum is pivoted by its [firmly-attached] operating handle (7) moved by the other hand, said drum pivoting on an axle (25) that is preferably at a right angle to the plate, at the free end (45) of a connecting arm (8) which also pivots on an axle (9) parallel to the axle (25) of the drum (6), on the lid-wedging plate (1), preferably close to the perpendicular surface of the [adherent] wall (2).

- 2 -

- 3) A device according to [the preceding claim] claim 2, characterized by having at least one of the lid-blocking walls (2,4) adjustable to vary the spread between the walls to fit various diameters of twist-off lids (12).
- 5 4) A device according to claim 2, further characterized by a channelling (29) in the lid-wedging plate (1) between the walls (2,4) to allow the belt-winding drum (6) to move closer to small-diameter containers (11) in order to rotate them.
- 10 5) A device according to claim 2, further characterized by an oblong slot (19) in the connecting arm (8) at the level of at least one of the two axles (9, 25) to let the connecting arm travel to vary the distance between
- 15 the axle (9) of the connecting arm (8) on the lid-wedging plate (1) and the axle (25) of the drum (6).
- 6) (cancelled)  
~~[A device according to [claims 1 to 4] claim 2, further characterized by a connecting arm (8) that is divided into at least two segments (47, 48) jointed to form an elbow in the plane of the lid-wedging plate (1). ]~~
- 7) A device according to claim 2, further characterized by a lid-wedging plate (1) with an extension opposite the working zone of the connecting arm (8)
- 20 to make a handle (33) to hold the device.

- 3 -

- 8) A device according to claim 2 further characterized by a belt-winding guide (40) on the drum (6) shaped like a U lying on its side with the upper side (41) and lower side (42) barely touching the upper  
5 surface (43) and lower surface (44) of the drum (6), said belt-winding drive being mounted preferably under the free end (45) of the connecting arm (8).
- 9) A device according to claim 2 further characterized by a stop (39) to halt the operating handle (7) at  
10 its starting position, said stop being integral with the lid-wedging plate (1) or the connecting arm (8).
- 10) A device according to claim 2 characterized by a connecting arm (8) with at least one element to restore the starting position, such as a traction  
15 spring (35) with one end coil attached to the lid-wedging plate (1) and the other end coil attached to the connecting arm (8).

03

- 2) - In answer to points 5 and 6 in your office communication of Jan. 6, 2005, please see the following comparative 3-page study of the WEISBAND patent (5,313,856) and the SEBILEAU patent .

This more detailed comparison cancels and replaces page 11 of the description, and becomes pages 11, 12 and 13 of the description.

Résumé of the description of the appliance US 5313857

The described appliance enables one to open or close containers with screw-on lids (Column 1, lines 4 to 8).

This appliance consists of three sub-assemblies (Column 2, lines 7 to 15).

- 1) Sub-assembly 20 for untwisting (or twisting on) consisting of sliding jaws 36 and 38 retracted by springs 56, pulled by cables 76, and actuated by the handle 70 while gripping the lid to be unscrewed .
- 2) Sub-assembly 22 which helps open the container by means of percussion by a system of cams 132 and 134 actuated by a swivelling handle 148 (drawing 4) (Col. 4, line 47 to col. 5, line 12), to help unstick the lid.
- 3) Sub-assembly 24, the frame within which the container is positioned between the legs 212 in the frame's lower part (drawing 6), said sub-assembly including a flexible belt 200 with one end 202 attached in an adequate housing of part 204 206 connected to the frame, while the other end of the belt 200 is mounted on a vertical pivoting shaft 108 (Col. 4, lines 15 to 18) that rolls up the belt in order to grip the container firmly to keep it from turning the least bit (Col. 4, lines 13 to 32).

Résumé of appliance US 5313857's 8 operations

- 1- Unfolding the appliance to stand it on its feet 212.
- 2- Placing the container's bottom inside the belt's loop between the legs 212 of the frame 24 that supports telescopic rods 190 188.
- 3- if necessary, disengagement of the ratchet 210 to unwind by hand enough of the belt for it to go around the container (Col. 4, lines 26 to 31).
- 4- tightening the belt 200 around the container, as the belt is

- wound up around the vertical shaft 108 by means of the ratchet handle 210 to keep the container from turning.
- 5- placing the twist-off sub-assembly 20 on the lid to be untwisted.
- 5 6- tightening the jaws 36 and 38 on the lid to be untwisted by the handles 70 and 118,
- 7- counter-clockwise rotation of the twist-off sub-assembly 20 to twist the lid off.
- 8- if necessary, swivelling the handle 148 of the percussion apparatus to help twist the lid off.
- 10

Résumé comparing the description and working method of appliance US 5 3313 857 A with those of the present apparatus

- The highly complicated sub-assembly 20 for untwisting has nothing in common with the present apparatus.
- 15 - The percussion sub-assembly does not exist in the present apparatus.
- Sub-assembly 24 has only one immediately-apparent resemblance to this apparatus, the use of a belt.

The belt in appliance US 5 313 857 A :

- 20 (Col. 4, lines 15 TO 25) It is a flexible belt :
- with one end mounted fixedly on a part that is attached to the frame,
- with enough length to form a loop around containers of various diameters,
- 25 - with the other end mounted on a vertical shaft that can wind up the belt to decrease its length with the ratchet of the belt-winding apparatus that maintains tension so that the container cannot turn inside the belt tightened from its fixed end to the ratchet.
- 30 The point of the belt's fixed attachment is always a point tangent to the immobilized container no matter what its diameter may be.

The action of belt-tightening does not move or untwist the lid in any way.

5 This belt mounted with one end fixed (statically) is a simple belt to immobilize the container by tightening around the container, similar to a cargo-lashing strap with a ratchet mounted at a fixed location.

The belt of the present apparatus :

10 It is a closed-loop belt fixed on a drum that winds up the loop (Page 4, lines 12-14), therefore having no static point (P. 5, lines 9-13); it is a dynamic drive belt, which tightens on the container, "making the container rotate along a course"... (P. 5, lines 11-12)

15 The single belt-tightening action, all by itself, makes the container rotate, which blocks its lid in the jamming device and untwists the lid.

In conclusion :

- 20 - the sole resemblance between appliance US 5 313 857 A and the present apparatus is the use of a belt tightened on the container, a similarity in appearance only since the belts are mounted in different ways for different functions.
- the specific assemblage and the particular working method of the belt in the state of the art of US 5 313 857 A does not reveal any characteristic of the apparatus described in this patent application.
- 25 - the operation of the appliance US 5 313 857 A consists of 8 actions, none of which exists in the present utensil's operation.

The document US 5 313 857 A does not show priority over the present document's features.



04

- 3) - In answer to point 7 of your office communication of Jan. 6, please see the following comparison of the SEBILEAU invention with the 12 U.S. patents that you listed.

(The name WHALEN on your list does not figure in your table between Barrow and MacKim. So I had no information on Whalen's patent for my comparison.)

The following table's columns show the differences between the Sebileau patent and the 12 others.

Please see also the summary of the Sebileau invention and the conclusion of the comparative study.

The summary and conclusion are to be added at the end of the patent description. So they become pages 14 and 15 of the description.

05

			Preliminary independent actions				STRAP						
1	2	3	4	5	6	7	8	9	10				
Priority date MM-YYYY		INVENTOR	JAR GRIPPED OR TURNED BY HAND(S) Y/N	STRAP ADJUSTMENT NEEDED Y/N	JAWS GRIP LID Y/N	Number of straps	STRAP LOOP Open/ Closed	LID LOOSENING INDUCED BY JAR ROTATION Y/N	Summary of columns differences from SEBILEAU				
09/2002	B	COPE	N	Y Y	N	1/Lid = 2 1/Jar	Open Open	N	5	7	8	9	
03/2001	A	CHUNG	N	N N	N	1/Lid = 2 1/Jar	Open Open	N	7	8	9		
06/1999	C	DUMONT	Y	Y	N	1/Lid = 1	Closed	N	4	5	9		
05/1998	D	TEETER	Y	Y Y	N	1/Lid = 1	Open	N	4	5	8	9	
05/1998		SEBILEAU	N	N	N	1/Jar = 1	Closed	Y					
02/1995	E	SADE	Y	Y	N	1/Lid = 1	Open	N	4	5	8	9	
02/1994	F	FREELAND	Y	Y	N	1/Lid = 1	Open	N	4	5	8	9	
04/1993	G	WEISBAND	N	Y	Y	1/Lid = 1	Open	N	5	6	8	9	
04/1993	H	GRIMES	Y	Y	N	1/Lid = 1	Open	N	4	8	9		
03/1991	I	HALPIN	Y	Y	N	1/Lid = 1	Open	N	4	8	9		
02/1990	J	BARROW	N	N Y	N	1/Lid = 2 1/Jar	Open	N	4	7	8	9	
04/1988	K	Mc KIM	Y	Y	N	1/Lid = 1	Open	Y	4	5	8		
12/1895	L	RAGATZ	N	N	N	1/Lid = 2 1/Jar	Open Open	N	7	8	9		

06

Column 1 ; Priority dates of the patents, in reverse order, with the latest priority on top and the earliest at the bottom

Column 2 : The letters with which the USPTO designated the 12 patents it mentioned

Column 3 : Names of the inventors

Column 4 : "Jar turned or gripped by hand ?"

The 7 "yes" answers show devices that only squeeze the lid, which obliges the operator to grip the jar with at least one hand to immobilize it or twist it.

- With the SEBILEAU device, one doesn't need to touch or hold the jar with a hand;
- Those seven devices are quite different from SEBILEAU's.

Column 5 : "Strap adjustment needed ?"

The "yes" answers show that 9 devices require the operator to tighten the strap as a preliminary to unscrewing the lid.

- SEBILEAU's invention needs no preliminary adjustment.
- Those 9 devices differ from his in that respect.

Column 6 : "Jaws grip lid ?"

Shows another preliminary operation necessary in the case of the WEISBAND invention, which confirms a distinct difference from the SEBILEAU apparatus.

07

Column 7 : "Number of straps"

Shows that 4 devices use 2 straps, one to grip the jar and the other to grip the lid.

- The Sebileau device uses a single strap, on the jar. The other single-strap apparatuses all must have their strap fitted on the lid edge, a fussier operation.
- The 4 two-strap devices are far removed from the SEBILEAU invention.

Column 8 : "Strap loop open or closed ?"

Shows that only the DUMONT and SEBILEAU devices use a closed-loop strap.

- The DUMONT strap is not mounted in closed position on a winding drum to exert a circular-squeeze; the strap's two ends are fastened on a travelling block pulled by a screw in order to pull the loop so that it exerts a tangential tension that pulls a twist-off container (usually an oil filter) against a torque-transmitting shoe (claim 1, figures 2 - 8).
- The mounting method and operating method of DUMONT's device are far removed from those of the SEBILEAU invention.

08

Column 9 : "Lid loosened by jar rotation ?"

Shows that only the MACKIM and SEBILEAU devices work in that way.

- But the MacKim invention differs in the following ways :

- 1 - Its strap loop is open;
- 2 - so one end of the loose strap has to be wound up on a drum with one hand, as a preliminary, to tighten the strap around the lid;
- 3 - while holding the jar up with the other hand;
- 4 - and then the jar must be grasped with both hands to twist it loose from its lid.

- Thus the MACKIM device is far removed from the SEBILEAU invention.

Column 10 : "Differences from SEBILEAU by column" (i.e. columns showing differences from the Sebileau patent)

- This column shows a summary of the differences.

SUMMARY OF THE SEBILEAU INVENTION (in response to your office communication of Jan. 6, 2005) :

The essential points are explained in the description and shown in the drawings, starting with the basic apparatus in Figures 1 and 2, and showing more perfected ones in Figures 3,4,5 and 6, and the most advanced version in Fig. 7.

The originality of the SEBILEAU invention is seen in

1) Its particular arrangement of components :

- the lid-wedging plate held by a positioning handle that supports :
- a connecting arm supporting :
- a strap-winding drum bearing :
- a closed-loop strap (Fig. 9) and bearing an operating handle that turns the drum.

2) The way it works :

- The lid is loosened just by swiveling the operating handle to turn the drum less than one complete rotation.
- There is no preliminary action to adjust the strap nor any preliminary to immobilize the jar.

3) - The closed-loop strap :

The closed-loop strap is attached only to the drum, with no loose end that needs to be fastened or wound up elsewhere. This feature enables a single swivel movement of the operating handle to :

- 1) to tighten the strap around the jar;
  - 2) to push the lid into position to be unscrewed between the lid-wedging walls, thanks to a turning, travelling movement of the connecting arm;
  - 3) to rotate the jar enough to jam its lid between the wedging walls;
  - 4) which loosens and untwists the lid.
- The attachment of the loop to the drum alone has the advantage of tightening the strap twice as fast as other systems do before impelling the untwisting movement (by tightening with only half as much rotation of the drum); because both extremities of the strap (on each side of the attachment) are wound on the drum together, at the same time.

■ In conclusion :

- This attachment of a single closed-loop strap to a strap-winding drum is a particularity of the SEBILEAU invention.
- This type of mounting exists in none of the U.S. patents listed by the patent office.
- None of those U.S. patents show prior art to the SEBILEAU invention.